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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,605	08/22/2003	Domenick Vitulli	N81575/LPK	9806

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EXAMINER	
HAYLES, ASHFORD S	

ART UNIT	PAPER NUMBER
3687	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/646,605	VITULLI ET AL.	
	Examiner	Art Unit	
	ASHFORD HAYLES	3687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Amendment received on September 11, 2009 has been acknowledged. Amendments to Claims 1 and 18 have been entered. Therefore, claims 1-20 are currently pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1, 2, 11-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (PG PUB 2003/0172072) in view of Seymour (2003/0046122).**

As per Claim 1, Smith discloses an inventory management system for at least one piece of equipment requiring routine maintenance for a plurality of items (¶ [008] discusses a method and a system for automatically ordering replacement of consumable parts of a system), each of said items being associated with a respective parameter that provides an estimate of servicing needs for said item (¶ [008] discusses the method includes the steps of monitoring at least one parameter for a part of the system), said system comprising:

an inventory of replacements for said items (Such as inventory tracked in the inventory database 104 shown in Figure 1);

a computational element operatively coupled to said at least one piece of equipment and to each of said parameters (See Figure 2, Appliance Controller 202 which is coupled to appliance, construed to be a computational element); and

a tracking device operatively coupled to said computational element to derive a criteria to generate at least one order form that details current and future requirements of said items for said piece of equipment that are stocked within said inventory (See Figure 2, Part Monitor 204 which is incorporated to Appliance Controller 202, and communicates with Replacement Part Order System 100 via Communication Unit 208 found in [0032]).

However, Smith fails to disclose wherein the computational element provides a selective dormancy feature for at least one of said plurality of items, the dormancy feature when selected causing one or more of the plurality of items and its associated parameter to be placed in a dormant state so that parameter associated with the dormant item does not become a trigger point for the tracking device to generate an order for the dormant items.

Seymour teaches a detector 220 that is configured to detect the occurrence of a printer component event within the laser printer 200, such as a low toner event in the toner cartridge 208. The detector 220 is configured to detect printer component events in other components as well as the toner cartridge 208, such as when any component in the laser printer 200 requires replacement because it is inoperable or because a life cycle termination event defined for the component is forthcoming (pg.3, ¶ [0037]).

Seymour further teaches a monitor is configured to monitor a condition of printer components such as the toner cartridge in the laser printer. This may be accomplished by the monitor by periodically polling the printer components for a condition status or it may be accomplished by the monitor receiving a notification from the detector when a printer component event occurs in a printer component in the laser printer (pg.3, ¶ [0038]). Seymour also teaches a user interface module 224 provides a display, which is configured to allow a user to define rules with the rules-based system 110 for particular printers (pg.3, ¶ [0039]), the rules define one or more printer component conditions for the printers 118, 124 that, when occurring, indicate that a printer component requires replacement (pg.3, ¶ [0046]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the ability to allow a user to set rules to detect the reordering of replacement printer components as in Seymour in the system executing the method of Smith with the motivation of offering a rules-based printing device component management system that allows a printing device component vendor to monitor printer component conditions (Abstract) as taught by Seymour over that of Smith.

As per Claim 2, Smith disclose a means for at least one order form to be directed to a supplier of replacement items, at a location different from the one piece of equipment (¶ [0036] discloses an order form that can be received by the appliance controller forwarded to the replacement part order system via the appliance

Communications Unit 208, where the order form contains part number, account information and shipping information).

As per Claim 11, Smith discloses inventory management system wherein the piece of equipment is a printing press (¶ [0025] discusses a printer).

As per Claim 12, Smith discloses an inventory management system wherein said criteria includes at least an expected life for each of said items (¶ [0030] discusses a lifespan parameter which Examiner construes to be an expected life of the item, such as life of a light bulb).

As per Claim 13 Smith discloses an inventory management system wherein expected life remaining includes a parameter selected from at least one of the following parameters (¶ [0030] discusses a lifespan parameter): a number of power on hours remaining before said item is exhausted (¶ [0035] discloses a part replacement notification can be presented when the duration of use reaches 9,000 hours. If user does not decide to order a replacement the unit is monitored until it fails).

As per Claim 14, Smith discloses the inventory management system wherein said expected life remaining includes multiples of said parameters (¶ [0009] discusses multiple parameters that encompass expected life remaining of a consumable).

As per Claim 16, Smith discloses an inventory management system wherein said criteria is at least partially based on a threshold that compares expected life of said

items with usage of said equipment (¶ [0030] discusses on and off cycles and lifespan, which is construed to compare expected life to the usage, in order to determine

when replacement is recommended).

As per Claim 17, Smith discloses an electronic interface between said piece of equipment and a provider for supplies of said items wherein said order form is transferred from said piece of equipment to said provider for supplies at a different location from said piece of equipment (See Figure 1, Replacement Part Order Processing system 100 can be operated by a replacement part order center remotely located of the appliances).

As per Claim 18, Smith discloses a method of managing an inventory for serviceable equipment requiring routine maintenance for a plurality of items comprising the steps of (¶ [008] discusses a method and a system for automatically ordering replacement of consumable parts of a system);

providing an inventory of replacement parts for said items (Such as inventory tracked in the Inventory Database 104, shown in Figure 1);

associating each of said items with a parameter that provides an estimate of servicing needs for said item (¶ [0010] discusses comparator means for comparing the parameter to at least one replacement criterion for the part);

tracking said parameters to identify replenishment needs for said inventory (¶ [0010] discusses replacement of consumable parts of a system can

include part monitoring means for monitoring at least one parameter for a part of the system); and

generating an order form for replacement parts of said items for said inventory based on estimated needs (¶ [0010] discusses replacement criterion indicates that a replacement part should be ordered and order processing means for automatically communicating an order to a replacement part order center for a replacement for the part).

However, Smith fails to disclose wherein the computational element provides a selective dormancy feature for at least one of said plurality of items, the dormancy feature when selected causing one or more of the plurality of items and its associated parameter to be placed in a dormant state so that parameter associated with the dormant item does not become a trigger point for the tracking device to generate an order for the dormant items.

Seymour teaches a detector 220 that is configured to detect the occurrence of a printer component event within the laser printer 200, such as a low toner event in the toner cartridge 208. The detector 220 is configured to detect printer component events in other components as well as the toner cartridge 208, such as when any component in the laser printer 200 requires replacement because it is inoperable or because a life cycle termination event defined for the component is forthcoming (pg.3, ¶ [0037]). Seymour further teaches a monitor is configured to monitor a condition of printer components such as the toner cartridge in the laser printer. This may be accomplished

by the monitor by periodically polling the printer components for a condition status or it may be accomplished by the monitor receiving a notification from the detector when a printer component event occurs in a printer component in the laser printer (pg.3, ¶ [0038]). Seymour also teaches a user interface module 224 provides a display, which is configured to allow a user to define rules with the rules-based system 110 for particular printers (pg.3, ¶ [0039]), the rules define one or more printer component conditions for the printers 118, 124 that, when occurring, indicate that a printer component requires replacement (pg.3, ¶ [0046]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the ability to allow a user to set rules to detect the reordering of replacement printer components as in Seymour in the system executing the method of Smith with the motivation of offering a rules-based printing device component management system that allows a printing device component vendor to monitor printer component conditions (Abstract) as taught by Seymour over that of Smith.

As per Claim 19, Smith discloses a method of managing an inventory wherein the generating step further comprises generating said order form based on current and future needs of said serviceable equipment (See Figure 3, Step 306 which details the Replacement Part Ordering System 100 where single or multiple parts can be ordered and the use of a part in an appliance can be continually monitored by a part monitor until the part needs to be replaced).

4. **Claims 3-6 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (PG PUB 2003/0172072) in view of Seymour (2003/0046122) further in view of Martin et al. (#5,809,479).**

As per Claim 3, the Smith-Seymour combination discloses the structural elements of the claimed invention, however, the Smith-Seymour combination fails to disclose an inventory management system wherein a criteria includes a delivery time.

Smith, Seymour and Martin et al. are within the same field of inventory management. Martin teaches creating a customer order entry for a particular customer and a computer system which is programmed to reference customer preferences database during the order entry process to set preferable delivery dates for individual customers (as discussed in Column 3, lines 28-35).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inventory management system of the Smith-Seymour combination to include the customer order entry and computer that accesses the customer preferences database as taught by Martin et al. The motivation to combine is in order to fulfill customers request based on their preferences.

As per Claims 4-6 the Smith-Seymour combination discloses an inventory management system of the claimed invention, however, the Smith-Seymour combination fails to disclose an inventory management system wherein a criteria includes a specified set of ship dates, ship dates for identical set of items, and a plurality of optional ship dates.

Smith, Seymour and Martin et al. are within the same field of inventory management. Martin teaches a system where, the customers order entry is routed to a human order scheduler for assignment of a targeted ship date. Based upon the information contained in customer preferences database 12 and sales orders database 20, the computer system is programmed to show the order scheduler the calculated customer-preferred ship date and to obtain from the scheduler a targeted ship date for the customer order entry as discussed in Column 3, lines 56-66. Martin further teaches, that a targeted ship date window gives the range of actual ship dates which will result in an on time delivery to the customer, based upon the customer's own rules as discussed in Column 4, lines 17-19.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inventory management system of the Smith-Seymour combination to include the customer order entry and sales order entry as taught by Martin et al. The motivation to combine would be to allow a customer to receive early delivery of items as found in Column 2, lines 63-65.

As per Claims 7 and 8 the Smith-Seymour combination discloses an inventory management system of the claimed invention, however, the Smith-Seymour combination fails to disclose an inventory management system wherein a criteria is responsive to changes made in shipping dates and adjust to changes.

Smith, Seymour and Martin et al. are within the same field of inventory management. Martin teaches a system where, customer preferences might also be

included in database 12, indicating such information as whether customers will allow rescheduling of shipments, calendar holidays for each customer, and/or calendar holidays for the supplier. Customer preferences database 12 will preferably be updated at least once every year for each customer, or as otherwise determined to be needed as found in Column 3, lines 16-26.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inventory management system of the Smith-Seymour combination to include the customer preferences database as taught by Martin et al. The motivation to combine would be to allow the system to adjust for rescheduling of ship dates to allow for on-time deliveries.

1. **Claim 9, 10, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (PG PUB 2003/0172072) in view of Seymour (2003/0046122) further in view of Aoyama et al. (PG Pub. 2004/0172341).**

As per Claim 9-10 and 15, the Smith-Seymour combination discloses an inventory management system of the claimed invention, however the Smith-Seymour combination fails to disclose a criteria which prevents unnecessary shipping of replenishments for said items by arranging said order form such that shipments can occur based on a cost factor of shipping versus parts cost and provides for early shipping of increased amounts of inexpensive items to avoid additional shipments, as well as having at least a criteria partially based on replacement cost and shipping cost for said item.

Smith, Seymour and Aoyama et al. are within the same field of inventory management. Aoyama et al. teaches an external warehouse order system that can determine whether the additional shipping cost to ship the truckload of goods would outweigh the benefit obtained from ordering the larger volume, order data is optimized so as to reduce the cost of goods including shipping costs and to ensure inventory levels and provide delivery services as found in ¶ [0034] to [0035].

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inventory management system of the Smith-Seymour combination to include the external warehouse order system as taught by Aoyama. The motivation to combine would be to decrease shipping cost, storage costs, and to improve the ability to take advantage of volume discounts as found in ¶ [0007].

As per Claim 20, the Smith-Seymour combination discloses an inventory management system of the claimed invention, however the Smith-Seymour combination fails to disclose the step of generating an order form further comprises establishing a criteria for ordering replacement parts wherein said criteria is used to create a reduced number of said order forms that are generated to replenish said inventory.

Smith, Seymour and Aoyama are within the same field of inventory management. Aoyama et al. discloses a forecast management system that can provide forecast data to be generated and transmitted to an order controller system which

creates an order so as to realize price saving that offset potential losses from ordering too many goods as discussed in ¶ [0041].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inventory management system of the Smith-Seymour combination to include the forecast management system with the step of generating a purchase order as taught by Aoyama. The motivation to would be to reduce the cost of ordered goods including the cost of shipping as found ¶ [0038].

Response to Arguments

5. Applicant's arguments with respect to claims 1 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHFORD HAYLES whose telephone number is (571)270-5106. The examiner can normally be reached on Monday - Friday 8:00 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Gart can be reached on 571-272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S Gart/
Supervisory Patent Examiner, Art Unit 3687

/A. H./

Examiner, Art Unit 3687